

CHAPTER V

CONCLUSION

This research proposes a phase-wise software development effort estimation approach with feature selection process with the help of artificial neural network learning techniques. The amalgamation produces an integrated accurate fine-grained estimation that yields good estimation results on phase-wise and conventional overall estimation. The experiments show that phase-wise estimation approach is a promising approach for high accurate prediction.

There have been several findings precipitated from this work. Firstly, phase-wise estimation offers individual work breakdown that can be traced, scrutinized, rectified, enhanced, and administered. Secondly, the proposed technique yields more accurate estimation owing to the feature selection process and neural network technique. Thirdly, as the proposed technique used fewer feature/effort/cost drivers, the project manager or estimator can save time to collect project data for the effort estimation. And finally, the fine-grained dichotomy might lend itself to access other project development approaches such as spiral, whose iterative process could embrace phase-wise estimation into consideration.

One indirect benefit is project visibility that supports project manager's decision to outsource certain activities within a development phase that the project team does not have the right expertise, too expensive to build, or not worthwhile to spend the time, etc. Such phase-wise visibility might not have been possible to recognize if those activities had not been unveiled by the proposed technique. Consequently, project managers and experts can spend less time predicting software project costs and more time on important issues. These advantages will be conducive toward efficient project management. It is envisioned that the proposed method would be applied to predict effort of iteration development approach.

